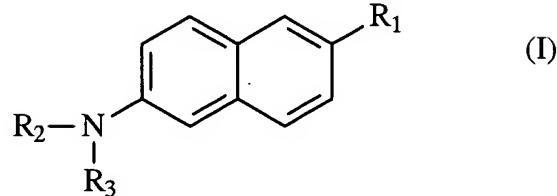


We claim:

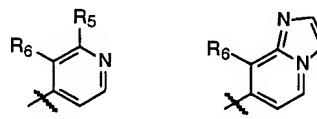
1. A composition comprising a compound of formula (I):

5



wherein:

10  $R_1$  is selected from the group consisting of  $-C(O)$ -alkyl,  $-C(O)$ -alkylenyl- $R_4$ ,  $-C(O)O$ -alkyl,  $-C(O)O$ -alkylenyl- $R_4$ ,  $-C=C(CN)_2$ -alkyl,  $-C=C(CN)_2$ -alkylenyl- $R_4$ ,



and



;

15

wherein

$R_4$  is a radical selected from the group consisting of alkyl, substituted alkyl, aryl and substituted aryl;

20  $R_5$  is a radical selected from the group consisting of  $-NH_2$ ,  $-OH$ ,  $-SH$ ,  $-NH$ -alkyl,  $-NHR_4$ ,  $-NH$ -alkylenyl- $R_4$ ,  $-O$ -alkyl,  $-O$ -alkylenyl- $R_4$ ,  $-S$ -alkyl, and  $-S$ -alkylenyl- $R_4$ ;

$R_6$  is a radical selected from the group consisting of  $-CN$ ,  $-COOH$ ,  $-C(O)O$ -alkyl,  $-C(O)O$ -alkylenyl- $R_4$ ,  $-C(O)$ -alkyl,  $-C(O)$ -alkylenyl- $R_4$ ,  $-C(O)$ -halogen,  $-C(O)NH_2$ ,  $-C(O)NH$ -alkyl,  $-C(O)NH$ -alkylenyl- $R_4$ ;

25  $R_7$  is a radical selected from the group consisting of O, NH, and S; and

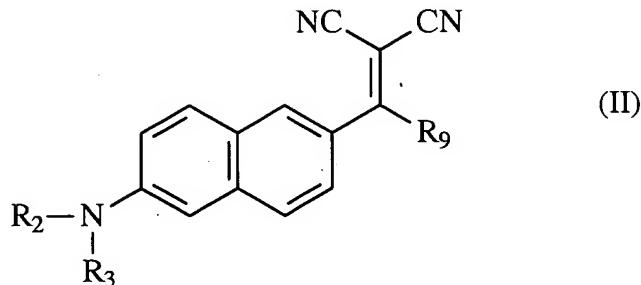
$R_8$  is N, O or S; and

$R_2$  is selected from the group consisting of alkyl and alkylenyl- $R_{10}$  and  $R_3$  is alkylenyl- $R_{10}$ , wherein  $R_{10}$  is selected from the group consisting of -OH, -OTs, halogen, spiperone, spiperone ketal, and spiperone-3-yl,

or  $R_2$  and  $R_3$  together form a heterocyclic ring, optionally substituted with at least one radical selected from the group consisting of alkyl, alkoxy, OH, OTs, halogen, alkyl- $R_{10}$ , carbonyl, spiperone, spiperone ketal and spiperone-3-yl,  
 and further wherein one or more of the hydrogen, halogen or carbon atoms are optionally replaced with a radiolabel.

2. A composition according to claim 1, wherein the compound of formula (I) is radiolabeled with  $^{18}F$  or  $^{123}I$ .

3. A composition according to claim 1, comprising a compound of formula (II):



20

wherein

$R_2$  is selected from the group consisting of alkyl and alkylenyl- $R_{10}$  and  $R_{10}$  is alkylenyl- $R_{10}$ , wherein  $R_{10}$  is selected from the group consisting of -OH, -OTs, halogen, spiperone, spiperone ketal and spiperone-3-yl,

25  
 or  $R_2$  and  $R_3$  together form a heterocyclic ring, optionally substituted with at least one radical selected from the group consisting of alkyl, alkoxy, OH, OTs, halogen, alkylenyl- $R_{10}$ , carbonyl, spiperone, spiperone ketal and spiperone-3-yl,  
 and  $R_9$  is an alkyl group;

or a pharmaceutically acceptable salt or solvate thereof;

and further wherein one or more of the hydrogen, halogen or carbon atoms are optionally replaced with a radiolabel.

5       4.      A composition according to claim 3, wherein the compound of formula (II) is radiolabeled with  $^{18}\text{F}$  or  $^{123}\text{I}$ .

5.      A composition according to claim 1, wherein the compound of formula (I) is 2-(1,1-dicyanopropen-2-yl)-6-(2- [ $^{18}\text{F}$ ]-fluoroethyl)-methylamino)-naphthalene.